

Toshiba America Medical Systems, Inc

510(k) Premarket Notification  
Aplio Artida SSH-880CV Ultrasound System**510(k) Summary of Safety and Effectiveness: 21 CFR 807.92**

**Submitter's Name:** Toshiba America Medical Systems, Inc.  
**Address:** PO Box 2068, 2441 Michelle Drive Tustin, CA 92781-2068  
**Contact:** Paul Biggins, Director of Regulatory Affairs  
**Telephone No.:** (714) 730-5000

**Device Proprietary Name:** APLIO ARTIDA MODEL SSH-880CV  
**Common Name:** Diagnostic Ultrasound System

FEB 6 2002

**Classification:**

**Regulatory Class:** II  
**Review Category:** Tier II

Ultrasonic Pulsed Doppler Imaging System – Product Code: 90-IYN  
[Fed.Reg.No.:892.1550]  
Ultrasonic Pulsed Echo Imaging System – Product Code: 90-IYO  
[Fed.Reg.No.:892.1560]  
Diagnostic Ultrasonic Transducer – Product Code: 90-ITX  
[Fed. Reg. No.: 892.1570]

**Identification of Predicate Devices:**

Toshiba America Medical Systems believes that this device is substantially equivalent to:

- 1) Toshiba Ultrasound Diagnostic System APLIO ARTIDA MODEL SSH-880A ; 510(k) control number k072826.
- 2) Toshiba Ultrasound Diagnostic System APLIO XG MODEL SSA-790A ; 510(k) control number k072000.

**Device Description:**

This device is a mobile system. This system is a Track 3 device that employs a wide range of probes that include flat linear array and sector array with a frequency range of approximately 2.5 MHz to 7.5 MHz.

**Intended Use:**

This device is intended to be used for the following type of studies; cardiac, transesophageal and peripheral vascular.

**Safety Considerations:**

This device is designed and manufactured in conjunction with the Quality System Regulation, IEC 60601-1 (applicable portions), IEC 60601-1-2 (applicable portion), IEC60601-2-37 (applicable portions), and the AIUM-NEMA UD2 Output Measurement Standard as applied to Track 3 Ultrasound systems and the AIUM-NEMA UD3 Output Display Standard.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

FEB - 8 2008

Toshiba America Medical Systems, Inc.  
% Mr. Mark Job  
Responsible Third Party Official  
Regulatory Technology Services LLC  
1394 25<sup>th</sup> Street NW  
BUFFALO MN 55313

Re: K080160

Trade/Device Name: APLIO ARTIDA Model: SSH-880CV Diagnostic Ultrasound System  
Regulation Number: 21 CFR 892.1550  
Regulation Name: Ultrasonic pulsed doppler imaging system  
Regulatory Class: II  
Product Code: IYN, IYO, and ITX  
Dated: January 22, 2008  
Received: January 23, 2008

Dear Mr. Job:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the APLIO ARTIDA Model: SSH-880CV Diagnostic Ultrasound System, as described in your premarket notification:

Transducer Model Number

PST-25SX  
PST-30SBT  
PLT-704SBT  
PET-511BTM  
PC-20M

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This determination of substantial equivalence is granted on the condition that prior to shipping the first device, you submit a postclearance special report. This report should contain complete information, including acoustic output measurements based on production line devices, requested in Appendix G, (enclosed) of the Center's September 30, 1997 "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers." If the special report is incomplete or contains unacceptable values (e.g., acoustic output greater than approved levels), then the 510(k) clearance may not apply to the production units which as a result may be considered adulterated or misbranded.

The special report should reference the manufacturer's 510(k) number. It should be clearly and prominently marked "ADD-TO-FILE" and should be submitted in duplicate to:

Food and Drug Administration  
Center for Devices and Radiological Health  
Document Mail Center (HFZ-401)  
9200 Corporate Boulevard  
Rockville, Maryland 20850

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>

If you have any questions regarding the content of this letter, please contact Lauren Hefner at (240) 276-3666.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Nancy C. Brogdon".

for Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure(s)

## Diagnostic Ultrasound Indications For Use Form

System X Transducer \_\_\_\_\_Model SSH-880CV510(k) Number(s) K080160

Clinical Application	Mode of Operation												
	B	THI	M	Color Doppler	Power	Dynamic Flow	TDI	PW	CW	CHI 2D	CHI Dynamic Flow	Combined (Specify)*	4D (Realtime 3D)
Ophthalmic													
Fetal													
Abdominal													
Intraoperative (Specify)													
Intraoperative Neurological													
Pediatric									N				
Small Organ (Specify)	N	N	N	N	N	N		N				N	
Neonatal Cephalic													
Adult Cephalic													
Cardiac	N	N	N	N			N	N	N	N	N	N	N
Transesophageal													
Transrectal													
Transvaginal													
Transurethral													
Intravascular													
Peripheral Vascular	N	N	N	N	N	N		N	N			N	
Laparoscopic													
Musculo-skeletal Superficial													
Musculo-skeletal Conventional													

N= new indication; P = Previously Cleared by FDA; E = Added under Appendix E (LTF)

Additional Comments: Combined Modes: B/M; B/PWD; BDF/PWD; BDF/MDF;BDF/MDF/PWD; 2D/CWD; BDF/CWDSmall organ = heartCardiac = adult and pediatric(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON OTHER PAGES IF NEEDED)  
Concurrence of CDRH, Office of Device Evaluation (ODE)

✓ Prescription Use (Per 21 CFR 801.109)11

[Signature]  
(Division Sign-Off)Division of Reproductive, Abdominal and  
Radiological Devices510(k) Number K080160

## Diagnostic Ultrasound Indications For Use Form

System \_\_\_\_\_ Transducer XModel PST-25SX510(k) Number(s) K080160

Clinical Application	Mode of Operation												
	B	THI	M	Color Dopp- ler	Power	Dynamic Flow	TDI	PW	CW	CHI 2D	CHI Dynamic Flow	Combined (Specify)	4D (Realtime 3D)
Ophthalmic													
Fetal													
Abdominal													
Intraoperative (Specify)													
Intraoperative Neurological													
Pediatric													
Small Organ (Specify)*													
Neonatal Cephalic													
Adult Cephalic													
Cardiac	P	P											P
Transesophageal													
Transrectal													
Transvaginal													
Transurethral													
Intravascular													
Peripheral Vascular													
Laparoscopic													
Musculo-skeletal Superficial													
Musculo-skeletal Conventional													

N= new indication; P = Previously Cleared by FDA; E = Added under Appendix E (LTF)

Additional Comments: \_\_\_\_\_ Combined Modes: None

Predicate 510(k) K072826

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Concurrence of CDRH, Office of Device Evaluation (ODE)

✓ Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Reproductive, Abdominal and  
Radiological Devices

510(k) Number

K080160

**Diagnostic Ultrasound Indications For Use Form**System \_\_\_\_ Transducer XModel PST-30SBT510(k) Number(s) K080160

Clinical Application	Mode of Operation												
	B	THI	M	Color Doppler	Power	Dynamic Flow	TDI	PW	CW	CHI 2D	CHI Dynamic Flow	Combined (Specify)	4D (Realtime 3D)
Ophthalmic													
Fetal													
Abdominal													
Intraoperative (Specify)													
Intraoperative Neurological													
Pediatric													
Small Organ (Specify)*													
Neonatal Cephalic													
Adult Cephalic													
Cardiac	P	P	P	P			P	P	P	P	P	P	
Transesophageal													
Transrectal													
Transvaginal													
Transurethral													
Intravascular													
Peripheral Vascular													
Laparoscopic													
Musculo-skeletal Superficial													
Musculo-skeletal Conventional													

N= new indication; P = Previously Cleared by FDA; E = Added under Appendix E (LTF)

Additional Comments: \_\_\_\_\_ Combined Modes: B/M; B/PWD;  
BDF/PWD; BDF/MDF; BDF/MDF/PWD; 2D/CWD; BDF/C

Previous 510k of this transducer : k072826

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Concurrence of CDRH, Office of Device Evaluation (ODE)

✓ Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Reproductive, Abdominal and  
Radiological Devices

510(k) Number

K080160

## Diagnostic Ultrasound Indications For Use Form

System \_\_\_\_\_ Transducer XModel PLT-704SBT

510(k) Number(s) \_\_\_\_\_

K080160

Clinical Application	Mode of Operation												
	B	THI	M	Color Doppler	Power	Dynamic Flow	TDI	PW	CW	CHI 2D	CHI Dynamic Flow	Combined (Specify)*	4D (Realtime 3D)
Ophthalmic													
Fetal													
Abdominal													
Intraoperative (Specify)													
Intraoperative Neurological													
Pediatric													
Small Organ (Specify)	P	P	P	P	P	P		P				P	
Neonatal Cephalic													
Adult Cephalic													
Cardiac													
Transesophageal													
Transrectal													
Transvaginal													
Transurethral													
Intravascular													
Peripheral Vascular	P	P	P	P	P	P		P				P	
Laparoscopic													
Musculo-skeletal Superficial													
Musculo-skeletal Conventional													

N= new indication; P = Previously Cleared by FDA; E = Added under Appendix E (LTF)

Additional Comments: Combined Modes: B/M; B/PWD;BDF/PWD; BDF/MDF; BDF/MDF/PWD;Previous 510(k) of this transducer: K072000(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON OTHER PAGES IF NEEDED)  
Concurrence of CDRH, Office of Device Evaluation (ODE)

✓ Prescription Use (Per 21 CFR 801.109)11

[Signature]  
(Division Sign-Off)Division of Reproductive, Abdominal and  
Radiological Devices510(k) Number K080160



**Diagnostic Ultrasound Indications For Use Form**

System \_\_\_\_ Transducer X  
 Model PET-511BTM  
 510(k) Number(s) K080160

Clinical Application	Mode of Operation												
	B	THI	M	Color Doppler	Power	Dynamic Flow	TDI	PW	CW	CHI 2D	CHI Dynamic Flow	Combined (Specify)	4D (Realtime 3D)
Ophthalmic													
Fetal													
Abdominal													
Intraoperative (Specify)													
Intraoperative Neurological													
Pediatric													
Small Organ (Specify)*													
Neonatal Cephalic													
Adult Cephalic													
Cardiac													
Transesophageal	P	P	P	P				P	P	P		P	
Transrectal													
Transvaginal													
Transurethral													
Intravascular													
Peripheral Vascular													
Laparoscopic													
Musculo-skeletal													
Superficial													
Musculo-skeletal Conventional													

N= new indication; P = Previously Cleared by FDA; E = Added under Appendix E (LTF)

Additional Comments: \_\_\_\_\_ Combined Modes: B/M; B/PWD;  
 BDF/PWD; BDF/MDF; BDF/MDF/PWD; B-TDI; M-TDI; 2D/CWD; BDF/CWD;

**Previous 510k of this transducer : k072000**

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 Concurrence of CDRH, Office of Device Evaluation (ODE)

✓ Prescription Use (Per 21 CFR 801.109)

*[Signature]*  
 (Division Sign-Off)  
 Division of Reproductive, Abdominal and  
 Radiological Devices  
 510(k) Number K080160

**Diagnostic Ultrasound Indications For Use Form**System \_\_\_\_ Transducer XModel PC-20M510(k) Number(s) K080160

Clinical Application	Mode of Operation												
	B	THI	M	Color Doppler	Power	Dynamic Flow	TDI	PW	CW	CHI 2D	CHI Dynamic Flow	Combined (Specify)	4D (Realtime 3D)
Ophthalmic													
Fetal													
Abdominal													
Intraoperative (Specify)													
Intraoperative Neurological													
Pediatric									P				
Small Organ (Specify)*													
Neonatal Cephalic													
Adult Cephalic													
Cardiac									P				
Transesophageal													
Transrectal													
Transvaginal													
Transurethral													
Intravascular													
Peripheral Vascular									P				
Laparoscopic													
Musculo-skeletal Superficial													
Musculo-skeletal Conventional													

N= new indication; P = Previously Cleared by FDA; E = Added under Appendix E (LTF)

Additional Comments: \_\_\_\_\_

**Previous 510k of this transducer : k072000**(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON OTHER PAGES IF NEEDED)  
Concurrence of CDRH, Office of Device Evaluation (ODE)

✓ Prescription Use (Per 21 CFR 801.109)

  
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Radiological Devices510(k) Number K080160